

INPUT SET: S29925.raw

This Raw Listing contains the General Information Section and up to the first 5 pages.

SEQUENCE LISTING

3 (1) General Information:

5 (i) APPLICANT: Xu, Hong-Ji
6 Hu, Shi-Xue
7 Benedict, William F.
8 Zhou, Yunli

10 (ii) TITLE OF INVENTION: MODIFIED RETINOBLASTOMA TUMOR SUPPRESSOR
11 PROTEINS

13 (iii) NUMBER OF SEQUENCES: 51

15 (iv) CORRESPONDENCE ADDRESS:

16 (A) ADDRESSEE: Arnold, White & Durkee
17 (B) STREET: P.O. Box 4433
18 (C) CITY: Houston
19 (D) STATE: TX
20 (E) COUNTRY: USA
21 (F) ZIP: 77210-4433

23 (v) COMPUTER READABLE FORM:

24 (A) MEDIUM TYPE: Floppy disk
25 (B) COMPUTER: IBM PC compatible
26 (C) OPERATING SYSTEM: PC-DOS/MS-DOS
27 (D) SOFTWARE: PatentIn Release #1.0, Version #1.30

29 (vi) CURRENT APPLICATION DATA:
30 (A) APPLICATION NUMBER: US UNKNOWN
31 (B) FILING DATE: 19-FEB-1998
32 (C) CLASSIFICATION: UNKNOWN

34 (vii) PRIOR APPLICATION DATA:
35 (A) APPLICATION NUMBER: US 60/038,118
36 (B) FILING DATE: 20-FEB-1997

38 (viii) ATTORNEY/AGENT INFORMATION:
39 (A) NAME: Hibler, David W.
40 (B) REGISTRATION NUMBER: 41,071
41 (C) REFERENCE/DOCKET NUMBER: UTXC:506

43 (ix) TELECOMMUNICATION INFORMATION:
44 (A) TELEPHONE: 512/418-3000
45 (B) TELEFAX: 512/474-7577

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/026,459ADATE: 11/18/98
TIME: 15:17:22

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47
48 (2) INFORMATION FOR SEQ ID NO:1:
49
50 (i) SEQUENCE CHARACTERISTICS:
51 (A) LENGTH: 3555 base pairs
52 (B) TYPE: nucleic acid
53 (C) STRANDEDNESS: single
54 (D) TOPOLOGY: linear
55
56 (ix) FEATURE:
57 (A) NAME/KEY: CDS
58 (B) LOCATION: 7..2790
59
60 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:
61
62 CGCGTC ATG CCG CCC AAA ACC CCC CGA AAA ACG GCC GCC ACC GCC GCC 48
63 Met Pro Pro Lys Thr Pro Arg Lys Thr Ala Ala Thr Ala Ala
64 1 5 10
65
66 GCT GCC GCC GCG GAA CCC CCG GCA CCG CCG CCG CCC CCT CCT GAG 96
67 Ala Ala Ala Ala Glu Pro Pro Ala Pro Pro Pro Pro Pro Pro Glu
68 15 20 25 30
69
70 GAG GAC CCA GAG CAG GAC AGC GGC CCG GAG GAC CTG CCT CTC GTC AGG 144
71 Glu Asp Pro Glu Gln Asp Ser Gly Pro Glu Asp Leu Pro Leu Val Arg
72 35 40 45
73
74 CTT GAG TTT GAA GAA ACA GAA CCT GAT TTT ACT GCA TTA TGT CAG 192
75 Leu Glu Phe Glu Glu Thr Glu Glu Pro Asp Phe Thr Ala Leu Cys Gln
76 50 55 60
77
78 AAA TTA AAG ATA CCA GAT CAT GTC AGA GAG AGA GCT TGG TTA ACT TGG 240
79 Lys Leu Lys Ile Pro Asp His Val Arg Glu Arg Ala Trp Leu Thr Trp
80 65 70 75
81
82 GAG AAA GTT TCA TCT GTG GAT GGA GTA TTG GGA GGT TAT ATT CAA AAG 288
83 Glu Lys Val Ser Ser Val Asp Gly Val Leu Gly Gly Tyr Ile Gln Lys
84 80 85 90
85
86 AAA AAG GAA CTG TGG GGA ATC TGT ATC TTT ATT GCA GCA GTT GAC CTA 336
87 Lys Lys Glu Leu Trp Gly Ile Cys Ile Phe Ile Ala Ala Val Asp Leu
88 95 100 105 110
89
90 GAT GAG ATG TCG TTC ACT TTT ACT GAG CTA CAG AAA AAC ATA GAA ATC 384
91 Asp Glu Met Ser Phe Thr Phe Glu Leu Gln Lys Asn Ile Glu Ile
92 115 120 125
93
94 AGT GTC CAT AAA TTC TTT AAC TTA CTA AAA GAA ATT GAT ACC AGT ACC 432
95 Ser Val His Lys Phe Phe Asn Leu Leu Lys Glu Ile Asp Thr Ser Thr
96 130 135 140
97
98 AAA GTT GAT AAT GCT ATG TCA AGA CTG TTG AAG AAG TAT GAT GTA TTG 480
99 Lys Val Asp Asn Ala Met Ser Arg Leu Leu Lys Lys Tyr Asp Val Leu

**RAW SEQUENCE LISTING
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100	145	150	155	
101				
102	TTT GCA CTC TTC AGC AAA TTG GAA AGG ACA TGT GAA CTT ATA TAT TTG			528
103	Phe Ala Leu Phe Ser Lys Leu Glu Arg Thr Cys Glu Leu Ile Tyr Leu			
104	160	165	170	
105				
106	ACA CAA CCC AGC AGT TCG ATA TCT ACT GAA ATA AAT TCT GCA TTG GTG			576
107	Thr Gln Pro Ser Ser Ser Ile Ser Thr Glu Ile Asn Ser Ala Leu Val			
108	175	180	185	190
109				
110	CTA AAA GTT TCT TGG ATC ACA TTT TTA GCT AAA GGG GAA GTA TTA			624
111	Leu Lys Val Ser Trp Ile Thr Phe Leu Leu Ala Lys Gly Glu Val Leu			
112	195	200	205	
113				
114	CAA ATG GAA GAT GAT CTG GTG ATT TCA TTT CAG TTA ATG CTA TGT GTC			672
115	Gln Met Glu Asp Asp Leu Val Ile Ser Phe Gln Leu Met Leu Cys Val			
116	210	215	220	
117				
118	CTT GAC TAT TTT ATT AAA CTC TCA CCT CCC ATG TTG CTC AAA GAA CCA			720
119	Leu Asp Tyr Phe Ile Lys Leu Ser Pro Pro Met Leu Leu Lys Glu Pro			
120	225	230	235	
121				
122	TAT AAA ACA GCT GTT ATA CCC ATT AAT GGT TCA CCT CGA ACA CCC AGG			768
123	Tyr Lys Thr Ala Val Ile Pro Ile Asn Gly Ser Pro Arg Thr Pro Arg			
124	240	245	250	
125				
126	CGA GGT CAG AAC AGG AGT GCA CGG ATA GCA AAA CAA CTA GAA AAT GAT			816
127	Arg Gly Gln Asn Arg Ser Ala Arg Ile Ala Lys Gln Leu Glu Asn Asp			
128	255	260	265	270
129				
130	ACA AGA ATT ATT GAA GTT CTC TGT AAA GAA CAT GAA TGT AAT ATA GAT			864
131	Thr Arg Ile Ile Glu Val Leu Cys Lys Glu His Glu Cys Asn Ile Asp			
132	275	280	285	
133				
134	GAG GTG AAA AAT GTT TAT TTC AAA AAT TTT ATA CCT TTT ATG AAT TCT			912
135	Glu Val Lys Asn Val Tyr Phe Lys Asn Phe Ile Pro Phe Met Asn Ser			
136	290	295	300	
137				
138	CTT GGA CTT GTA ACA TCT AAT GGA CTT CCA GAG GTT GAA AAT CTT TCT			960
139	Leu Gly Leu Val Thr Ser Asn Gly Leu Pro Glu Val Glu Asn Leu Ser			
140	305	310	315	
141				
142	AAA CGA TAC GAA GAA ATT TAT CTT AAA AAT AAA GAT CTA GAT GCA AGA			1008
143	Lys Arg Tyr Glu Glu Ile Tyr Leu Lys Asn Lys Asp Leu Asp Ala Arg			
144	320	325	330	
145				
146	TTA TTT TTG GAT CAT GAT AAA ACT CTT CAG ACT GAT TCT ATA GAC AGT			1056
147	Leu Phe Leu Asp His Asp Lys Thr Leu Gln Thr Asp Ser Ile Asp Ser			
148	335	340	345	350
149				
150	TTT GAA ACA CAG AGA ACA CCA CGA AAA AGT AAC CTT GAT GAA GAG GTG			1104
151	Phe Glu Thr Gln Arg Thr Pro Arg Lys Ser Asn Leu Asp Glu Val			
152	355	360	365	

**RAW SEQUENCE LISTING
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153	AAT GTA ATT CCT CCA CAC ACT CCA GTT AGG ACT GTT ATG AAC ACT ATC	1152
154	Asn Val Ile Pro Pro His Thr Pro Val Arg Thr Val Met Asn Thr Ile	
155	370 375 380	
157		
158	CAA CAA TTA ATG ATG ATT TTA AAT TCA GCA AGT GAT CAA CCT TCA GAA	1200
159	Gln Gln Leu Met Met Ile Leu Asn Ser Ala Ser Asp Gln Pro Ser Glu	
160	385 390 395	
161		
162	AAT CTG ATT TCC TAT TTT AAC AAC TGC ACA GTG AAT CCA AAA GAA AGT	1248
163	Asn Leu Ile Ser Tyr Phe Asn Asn Cys Thr Val Asn Pro Lys Glu Ser	
164	400 405 410	
165		
166	ATA CTG AAA AGA GTG AAG GAT ATA GGA TAC ATC TTT AAA GAG AAA TTT	1296
167	Ile Leu Lys Arg Val Lys Asp Ile Gly Tyr Ile Phe Lys Glu Lys Phe	
168	415 420 425 430	
169		
170	GCT AAA GCT GTG GGA CAG GGT TGT GTC GAA ATT GGA TCA CAG CGA TAC	1344
171	Ala Lys Ala Val Gly Gln Gly Cys Val Glu Ile Gly Ser Gln Arg Tyr	
172	435 440 445	
173		
174	AAA CTT GGA GTT CGC TTG TAT TAC CGA GTA ATG GAA TCC ATG CTT AAA	1392
175	Lys Leu Gly Val Arg Leu Tyr Tyr Arg Val Met Glu Ser Met Leu Lys	
176	450 455 460	
177		
178	TCA GAA GAA GAA CGA TTA TCC ATT CAA AAT TTT AGC AAA CTT CTG AAT	1440
179	Ser Glu Glu Glu Arg Leu Ser Ile Gln Asn Phe Ser Lys Leu Leu Asn	
180	465 470 475	
181		
182	GAC AAC ATT TTT CAT ATG TCT TTA TTG GCG TGC GCT CTT GAG GTT GTA	1488
183	Asp Asn Ile Phe His Met Ser Leu Leu Ala Cys Ala Leu Glu Val Val	
184	480 485 490	
185		
186	ATG GCC ACA TAT AGC AGA AGT ACA TCT CAG AAT CTT GAT TCT GGA ACA	1536
187	Met Ala Thr Tyr Ser Arg Ser Thr Ser Gln Asn Leu Asp Ser Gly Thr	
188	495 500 505 510	
189		
190	GAT TTG TCT TTC CCA TGG ATT CTG AAT GTG CTT AAT TTA AAA GCC TTT	1584
191	Asp Leu Ser Phe Pro Trp Ile Leu Asn Val Leu Asn Leu Lys Ala Phe	
192	515 520 525	
193		
194	GAT TTT TAC AAA GTG ATC GAA AGT TTT ATC AAA GCA GAA GGC AAC TTG	1632
195	Asp Phe Tyr Lys Val Ile Glu Ser Phe Ile Lys Ala Glu Gly Asn Leu	
196	530 535 540	
197		
198	ACA AGA GAA ATG ATA AAA CAT TTA GAA CGA TGT GAA CAT CGA ATC ATG	1680
199	Thr Arg Glu Met Ile Lys His Leu Glu Arg Cys Glu His Arg Ile Met	
200	545 550 555	
201		
202	GAA TCC CTT GCA TGG CTC TCA GAT TCA CCT TTA TTT GAT CTT ATT AAA	1728
203	Glu Ser Leu Ala Trp Leu Ser Asp Ser Pro Leu Phe Asp Leu Ile Lys	
204	560 565 570	
205		

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206	CAA TCA AAG GAC CGA GAA GGA CCA ACT GAT CAC CTT GAA TCT GCT TGT	1776
207	Gln Ser Lys Asp Arg Glu Gly Pro Thr Asp His Leu Glu Ser Ala Cys	
208	575 580 585 590	
209		
210	CCT CTT AAT CCT CTC CAG AAT AAT CAC ACT GCA GCA GAT ATG TAT	1824
211	Pro Leu Asn Leu Pro Leu Gln Asn Asn His Thr Ala Ala Asp Met Tyr	
212	595 600 605	
213		
214	CTT TCT CCT GTA AGA TCT CCA AAG AAA AAA GGT TCA ACT ACG CGT GTA	1872
215	Leu Ser Pro Val Arg Ser Pro Lys Lys Lys Gly Ser Thr Thr Arg Val	
216	610 615 620	
217		
218	AAT TCT ACT GCA AAT GCA GAG ACA CAA GCA ACC TCA GCC TTC CAG ACC	1920
219	Asn Ser Thr Ala Asn Ala Glu Thr Gln Ala Thr Ser Ala Phe Gln Thr	
220	625 630 635	
221		
222	CAG AAG CCA TTG AAA TCT ACC TCT CTT TCA CTG TTT TAT AAA AAA GTG	1968
223	Gln Lys Pro Leu Lys Ser Thr Ser Leu Ser Leu Phe Tyr Lys Lys Val	
224	640 645 650	
225		
226	TAT CGG CTA GCC TAT CTC CGG CTA AAT ACA CTT TGT GAA CGC CTT CTG	2016
227	Tyr Arg Leu Ala Tyr Leu Arg Leu Asn Thr Leu Cys Glu Arg Leu Leu	
228	655 660 665 670	
229		
230	TCT GAG CAC CCA GAA TTA GAA CAT ATC ATC TGG ACC CTT TTC CAG CAC	2064
231	Ser Glu His Pro Glu Leu Glu His Ile Ile Trp Thr Leu Phe Gln His	
232	675 680 685	
233		
234	ACC CTG CAG AAT GAG TAT GAA CTC ATG AGA GAC AGG CAT TTG GAC CAA	2112
235	Thr Leu Gln Asn Glu Tyr Glu Leu Met Arg Asp Arg His Leu Asp Gln	
236	690 695 700	
237		
238	ATT ATG ATG TGT TCC ATG TAT GGC ATA TGC AAA GTG AAG AAT ATA GAC	2160
239	Ile Met Met Cys Ser Met Tyr Gly Ile Cys Lys Val Lys Asn Ile Asp	
240	705 710 715	
241		
242	CTT AAA TTC AAA ATC ATT GTA ACA GCA TAC AAG GAT CTT CCT CAT GCT	2208
243	Leu Lys Phe Lys Ile Ile Val Thr Ala Tyr Lys Asp Leu Pro His Ala	
244	720 725 730	
245		
246	GTT CAG GAG ACA TTC AAA CGT GTT TTG ATC AAA GAA GAG GAG TAT GAT	2256
247	Val Gln Glu Thr Phe Lys Arg Val Leu Ile Lys Glu Glu Tyr Asp	
248	735 740 745 750	
249		
250	TCT ATT ATA GTA TTC TAT AAC TCG GTC TTC ATG CAG AGA CTG AAA ACA	2304
251	Ser Ile Ile Val Phe Tyr Asn Ser Val Phe Met Gln Arg Leu Lys Thr	
252	755 760 765	
253		
254	AAT ATT TTG CAG TAT GCT TCC ACC AGG CCC CCT ACC TTG TCA CCA ATA	2352
255	Asn Ile Leu Gln Tyr Ala Ser Thr Arg Pro Pro Thr Leu Ser Pro Ile	
256	770 775 780	
257		
258	CCT CAC ATT CCT CGA AGC CCT TAC AAG TTT CCT AGT TCA CCC TTA CGG	2400

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SEQUENCE VERIFICATION REPORT
PATENT APPLICATION **US/09/026,459A**

DATE: 11/18/98
TIME: 15:17:29

INPUT SET: S29925.raw

Line	Error	Original Text
30	Wrong application Serial Number	(A) APPLICATION NUMBER: US UNKNOWN
32	Wrong Classification	(C) CLASSIFICATION: UNKNOWN